

TEXAS DEPARTMENT OF INSURANCE

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PRODUCT EVALUATION EC-64

Effective Date: June 1, 2012

*The following product has been evaluated for compliance with the wind loads specified in **International Residential Code (IRC)** and the **International Building Code (IBC)**. This product shall be subject to reevaluation **May 2016**.*

This product evaluation is not an endorsement of this product or a recommendation that this product be used. The Texas Department of Insurance has not authorized the use of any information contained in the product evaluation for advertising, or other commercial or promotional purpose.

This product evaluation is intended for use by those individuals who are following the design wind load criteria in Chapter 3 of the IRC and Section 1609 of the IBC. The design loads determined for the building or structure shall not exceed the design load rating specified for the products shown in the limitations section of this product evaluation. This product evaluation does not relieve a Texas licensed engineer of his responsibilities as outlined in the Texas Insurance Code, the Texas Administrative Code, and the Texas Engineering Practice Act.

GAF WeatherSide™ Fiber Cement Siding manufactured by

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440 Katherine Road
Wind Gap, PA 18091
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will be acceptable for use in designated catastrophe areas along the Texas Gulf Coast when installed in accordance with the manufacturer's installation instructions and this product evaluation.

PRODUCT DESCRIPTION

The following GAF WeatherSide™ products have been accepted:

The fiber-cement shingle siding products evaluated in this report are comprised of cellulose fiber, cement and silica. The proprietary mixture is formed into sheets and cut to the specific product dimensions. A textured, striated or wood grain pattern is then applied to the product before being sent into an autoclaving process. All products are pre-primed at the factory.

WeatherSide™ Emphasis™ Shingles are 9/32 inch thick, 14-5/8 inch x 25-5/32 inch fiber-cement siding shingles with a wood-grain surface and thatched edge; meets ASTM C1186, Type A, Grade 1.

WeatherSide™ Profile™ Shingles are 11/64 inch thick, 9 x 32 inch or 12 x 24 inch fiber-cement siding shingles with a striated surface and straight edge; meets ASTM C1186, Type A, Grade 1.

WeatherSide™ Purity™ Shingles are 11/64 inch thick, 12 x 24 inch fiber-cement siding shingles with a textured surface and Straight, Thatched or Wavy edge; meets ASTM C1186, Type A, Grade 1.

All **WeatherSide™ Fiber-Cement Siding** products are applied with white, 12 gauge x 1¾ inch long, 0.195 inch head diameter, hot-dip galvanized, ring-shank siding nails available from GAF for use in anchoring the product.

INSTALLATION REQUIREMENTS

General Installation Requirements: All fasteners shall be corrosion resistant.

If non-structural sheathing is installed between the siding and the wall studs, then the length of the fastener shall be increased so that the fasteners penetrate the structural sheathing a minimum of 1¼ inch. The substrate to which the siding is applied must be adequately supported, capable of having full holding power for the nails, and the surface must be clean, smooth and dry.

Use non-perforated No. 15 asphalt saturated felt underlayment meeting ASTM D4869 performance requirements or equal. Do not use coal-tar saturated felts which may stain the siding. Do not install reflective insulation, wool blanket insulation or any type of vapor barrier as an underlayment between the siding and the sheathing. If house wrap is used, it must have a minimum perm rating of 15.

Downspouts and gutters must be functioning prior to installation to prevent serious staining that may occur from any excess water draining over the new siding. Use durable materials for flashing around heads, jambs and sills of openings. Non-corroding, non-staining metal must be used at the head of openings. Use non-shrinking caulking compound, either white or matching colors, to weather seal all joints where siding abuts wooden trim, masonry or other projections.

GAF siding nails, backer strips and outside corners are recommended for accurate and complete installations.

GAF WeatherSide™ Fiber-Cement Siding is already primed. Prior to painting, ensure that the surface is dry and free of grease and mildew. Brush all surfaces thoroughly with a stiff fiber brush. Do NOT paint surfaces during or immediately following fog, rain, frost or temperatures under 50° F (10° C). NOTE: Before painting surfaces directly exposed to high heat from the sun or under windy conditions, consult the paint manufacturer's instructions.

Step 1

Apply appropriate underlayment to sheathing lapping horizontal joints 2" (51mm) and vertical joints 6" (152mm). Only apply enough underlayment that can be completely covered by siding. If this is not possible, do not permit water to drain over uncovered underlayment onto siding.

Step 2

Starting at the bottom, snap a chalk line around the building as a guide line for the top edge of the first course of siding. Snap succeeding horizontal course lines spacing the lines the necessary distance to provide the required exposure as indicated on the packaging.

Step 3

A 1/4" x 1-1/2" (6mm x 38mm) wood cant strip shall be placed along the bottom edge of the sheathing with the clearances as indicated on the packaging. The wood cant strip shall be secure with a minimum 12 gauge galvanized roofing nail with sufficient length to penetrate into and through the cant strip. The nails shall be spaced 12" o.c. and located between nail holes in the shingles.

Step 4

Start the first and odd numbered courses at the left corner of the wall with a full siding piece. Make sure this piece is properly placed, plumb, leveled and aligned with the chalk line to assure proper placement of succeeding courses. Drive nails in pre-drilled holes snug but not too tight. Before driving the last nail at the right hand end, insert a backer strip vertically in place and secure it with the last nail. Always use a backer strip and place centered at the joint between siding pieces and with its lower end overlapping the cant strip or the head of the lower course. Continue with full siding pieces. Install adjacent siding butting tightly together end to end. Do not leave spaces between siding pieces.

Step 5

Start the second course and all even numbered courses with a piece of siding cut in half lengthwise. Align the head of the siding with the chalk line with the lower edge overlapping the head of the course below to provide the necessary top-lap between courses. Drive nails in pre-drilled holes snug but not too tight. Install baker strips at every vertical union as in step 4. Continue row with full siding pieces. Repeat steps 4 and 5. At the top of the wall, measure height. Next install a 1" x 3" (25mm x 76mm) or 1" x 4" (25mm x 102mm) wood board at the top of the course to cover the cut edge. The 1" (25mm) gap will allow the board to be nailed to the sub surface material without nailing into the siding and possibly cause splitting. The wood cant strip shall be secure with a minimum 12 gauge galvanized roofing nail with sufficient length to penetrate into and through the cant strip. The nails shall be spaced 12" o.c. and located between nail holes in the shingles.

Step 6

Apply metal flashing properly at all door and window openings. In corner treatments, carry the underlayment felt around the corner of each side wall so there is a double thickness of No. 15 asphalt saturated felt over the corner. Use a non-shrinking caulking compound to weather-seal all joints where siding abuts wooden trim, masonry or other projections.

Wind Resistant Assemblies:

Assembly No. 1

Profile 9, Profile 12 and Purity Shingles (Exposed Nailing Method)

The following products are applicable: Profile 9, Profile 12 and Purity fiber cement shingles.

Fastener: 12 ga. x 1¾ inch long, 0.195 inch head diameter, hot-dip galvanized, ring-shank siding nails

Design pressure: -44.2 psf

Installation: Wall studs shall be minimum 2x4 SPF dimension lumber spaced a maximum of 16 inches on center. Wall bracing shall be installed as required. The walls shall be fully sheathed with minimum 19/32 inch wood structural panels. A building paper shall be applied to the walls before installing the shingles. The shingles shall be fastened to the wood structural panel sheathing using five (5) 12 gauge x 1¾ inch long, hot-dip galvanized, ring-shank nails. Refer to Figures 1-5 for nail hole locations. Flashing, trim, and corners should be installed according to the manufacturer's specifications.

Assembly No. 2

Emphasis Shingles (Exposed Nailing Method)

The following products are applicable: Emphasis fiber cement shingles.

Fastener: 12 ga. x 1¾ inch long, 0.195 inch head diameter, hot-dip galvanized, ring-shank siding nails

Design pressure: -36.1 psf

Installation: Wall studs shall be minimum 2x4 SPF dimension lumber spaced a maximum of 16 inches on center. Wall bracing shall be installed as required. The walls shall be fully sheathed with minimum 19/32 inch wood structural panels. A building paper shall be applied to the walls before installing the shingles. The shingles shall be fastened to the wood structural panel sheathing using five (5) 12 gauge x 1¾ inch long, hot-dip galvanized, ring-shank nails. Refer to Figure 6 for nail hole locations. Flashing, trim, and corners should be installed according to the manufacturer's specifications.

Note: The manufacturer's installation instructions shall be on the job site during the installation. All fasteners shall be corrosion resistant as specified in the International Residential Code (IRC), the International Building Code (IBC), and the Texas Revisions.

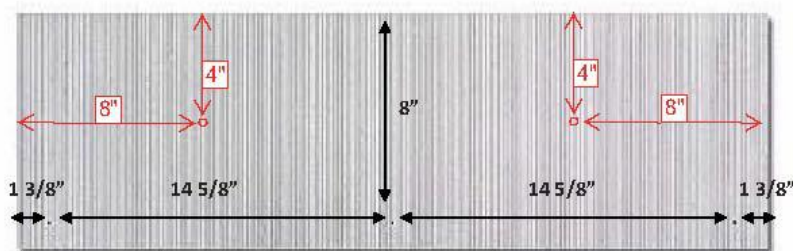


Figure 1: Profile™ 9, 5-nails/shingle

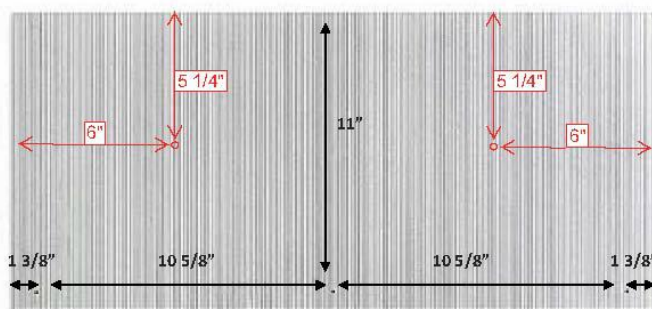


Figure 2: Profile™ 12, 5-nails/shingle

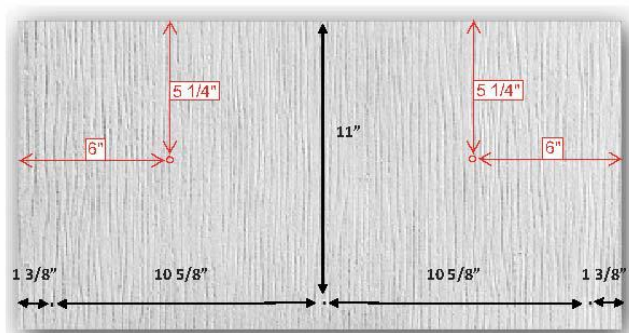


Figure 3: Purity™ Straight, 5-nails/shingle

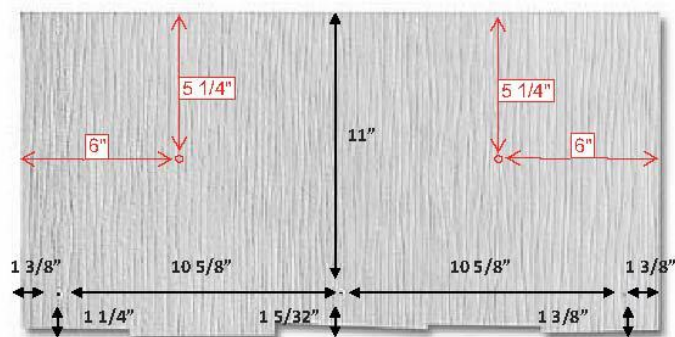


Figure 4: Purity™ Thatched, 5-nails/shingle

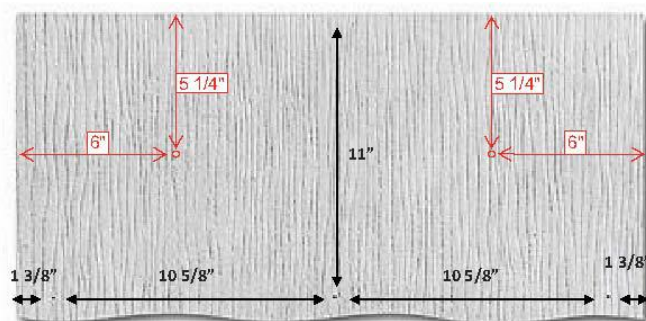


Figure 5: Purity™ Wavy, 5-nails/shingle

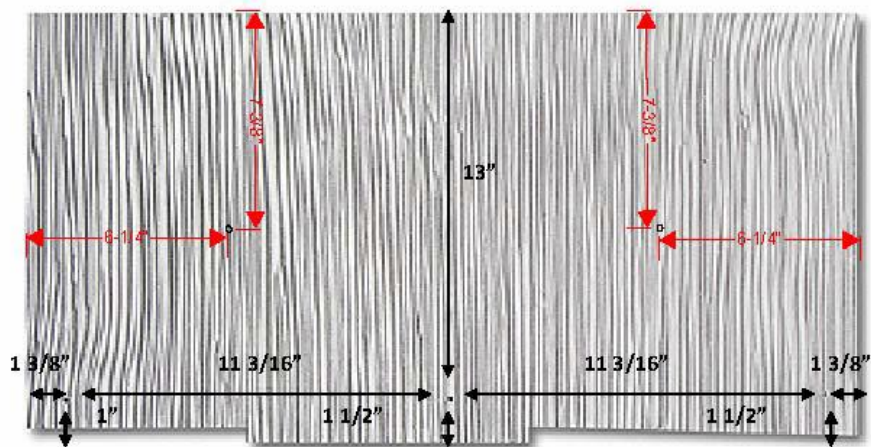


Figure 6: Emphasis™, 5-nails/shingle